## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
Transforming the 2.5 GHz Band	)	WT Docket No. 18-120

## COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc.<sup>1</sup> ("T-Mobile") commends the FCC for issuing the above-captioned Notice of Proposed Rulemaking to adopt rules that modernize the Educational Broadband Service ("EBS") by eliminating outdated restrictions on the use of EBS spectrum and creating a licensing process for EBS spectrum outside the currently authorized 35-mile point-radius geographic service areas ("P35 GSAs").<sup>2</sup> T-Mobile generally supports the overarching goal in the *Notice* of reforming the existing EBS rules consistent with more market-oriented regulatory structures. In particular, as discussed below, T-Mobile supports the FCC's proposal to eliminate the "educational use" requirements that currently apply to EBS licensees leasing their spectrum under Section 27.1214 of the FCC's rules.<sup>3</sup> The educational use requirements are outdated, difficult to administer, and prevent licensees from achieving the most efficient use of their licensees.

The 2.5 GHz band holds the potential for significantly advancing the FCC's 5G goals. The 2.5 GHz band is a large block of mid-band spectrum that could unlock significant 5G

<sup>&</sup>lt;sup>1</sup> T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly-traded company

<sup>&</sup>lt;sup>2</sup> Transforming the 2.5 GHz Band, WT Docket No. 18-120 (May 10, 2018) ("Notice").

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. §27.1214; see Notice at ¶22.

capacity—the spectrum has limited propagation, which means that while it is not ideal for providing wide area coverage, the large amount of spectrum in the band offers the ability to transmit high capacity data and offer high speed transmission. Given that 5G is a national priority, regulatory efforts to maximize the potential and utility of spectrum for 5G should presumptively be in the public interest.

While the technical rules and actual use of 2.5 GHz has largely transitioned to mobile broadband, the vestigial educational use regulations attached to the spectrum create complexities in using the spectrum to its fullest potential. As the Commission recognizes in the *Notice*, "most EBS licensees or their commercial lessees are providing digital broadband service." The educational use requirements, however, "have not been updated since 1998" and "are out of date and do not fit the actual use of the spectrum." As a result, these requirements can create a drag on the efficient deployment and use of 2.5 GHz spectrum.

On that basis, the FCC should eliminate the requirements to utilize a percentage of EBS spectrum for educational purposes, and any related EBS programming requirements.

Eliminating requirements for educational use will not affect entities who have continuing educational needs, since they can continue to use their spectrum as they see fit. Nothing about the proposed changes would preclude licensees who have robust EBS systems from continuing to use those systems to support educational needs and uses, and to further develop those systems. Thus, there is no downside—from an educational perspective—to elimination of the requirements.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> *Id*.

However, the EBS capacity regulations were adopted in an era when the FCC envisioned distribution of video content as an important enhancement for classrooms. Today, technology has eclipsed the use of radio for specialized video transmission—it is much more efficient to use Internet video streaming (for live events) or allow downloading of compressed video files (for recorded material) over generic broadband digital connections. At the same time, there is a greater emphasis on the educational use of other resources requiring digital connections, including communications with peers, collaboration platforms, and research, and the broadened requirement to be able to use broadband while moving from one classroom environment to another or ubiquitously around the school. Use requirements that are built around old models of use and content distribution necessarily lead to distortions and inefficiencies. Freed of usage requirements based on dated notions of how classroom and educators interact, educational licensees that are leasing their spectrum will have greater flexibility to address how the spectrum is used to further their educational mandates.

As a final matter, capacity requirements are inherently difficult to administer and are not rationally tied to educational needs. For modern networks, "five percent of the capacity" is a vague requirement—the overall capacity of the network changes daily as the network expands, cell density is increased, and as more or less spectrum is deployed on specific sites. "Five percent of the capacity" may also be more or less capacity than the educational institution actually requires, and may be measured in ways that are not relevant to educational institutions. Just as mobile broadband customers' needs are different, educational institutions and licensees may value coverage in specific areas over data rates, or network reliability and quality over total data consumption. Elimination of a requirement based on an ephemeral concept like capacity frees parties to negotiate for services that are more specifically tailored to their actual needs.

T-Mobile commends the FCC for its efforts to revitalize and modernize the critically important 2.5 GHz band. The efficient use of 2.5 GHz spectrum can unlock significant capacity benefits for 5G services, but only if the dated regulations are transformed and offer, as the *Notice* suggests, greater market flexibility to licensees. Critical to this end is eliminating requirements, like the educational use requirement, where technology and society have evolved in ways that render the requirement a drag on efficiency, rather than a means to promote educational goals and the effective use of spectrum. For these reasons, T-Mobile concurs strongly with the *Notice* proposal to eliminate any vestigial educational use requirements from the EBS regulations.

Respectfully submitted,

T-MOBILE USA, INC.

By: <u>/s/</u>

Steve B. Sharkey
Vice President, Government Affairs
Technology and Engineering Policy
T-Mobile USA, Inc.
601 Pennsylvania Ave., NW
Suite 800
Washington, DC 20004
(202) 654-5900